

State Office of Administrative Hearings



Cathleen Parsley
Chief Administrative Law Judge

September 28, 2010

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Les Trobman, General Counsel
Texas Commission on Environmental Quality
P.O. Box 13087
Austin Texas 78711-3087

Re: SOAH Docket No. 582-09-3064; TCEQ Docket No. 2008-1888-UIC; Application of Uranium Energy Corporation for Class III Injection Well Permit No. UR03075, for Aquifer Exemption, and for Production Area Authorization No. 1 in Goliad County, Texas

Dear Mr. Trobman:

Enclosed are copies of the Proposal for Decision (PFD) prepared in the above-referenced matter. You will note that I am not presenting a proposed order to the Commission at this time, because there remain unresolved issues which preclude a recommendation that the applications be granted at this time. The PFD recommends that the applications be remanded for additional evidence to be developed and made part of the record, or in the alternative, that the applications be denied. Thus, it is uncertain how the Commission may proceed with this case. If the Commission adopts the recommendation to remand, the ALJ can prepare a supplemental PFD and proposed order following the re-convened contested case hearing and close of the record.

Any party may file exceptions or briefs by filing the documents with the Chief Clerk of the Texas Commission on Environmental Quality no later than October 17, 2010. Any replies to exceptions or briefs must be filed in the same manner no later than October 27, 2010.

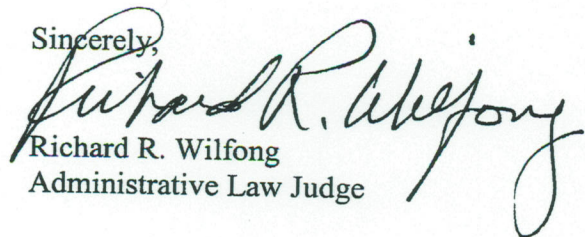
The above-referenced matter will be considered by the Texas Commission on Environmental Quality on a date and time to be determined by the Chief Clerk's Office in Room 201S of Building E, 12118 N. Interstate 35, Austin, Texas.

Attachment 1

SOAH DOCKET NO. 582-09-3064
TCEQ DOCKET NO. 2008-188-UIC
September 28, 2010
Page 2

This matter has been designated **TCEQ Docket No. 2008-1888-UIC; SOAH Docket No. 582-09-3064**. All documents to be filed must clearly reference these assigned docket numbers. All exceptions, briefs and replies along with certification of service to all parties shall be filed with the Chief Clerk of the TCEQ electronically at <http://www10.tceq.state.tx.us/epic/efilings/> or by filing an original and seven copies with the Chief Clerk of the TCEQ. Failure to provide copies may be grounds for withholding consideration of the pleadings.

Sincerely,


Richard R. Wilfong
Administrative Law Judge

RRW/sb
Enclosures
cc: Mailing List

State Office of Administrative Hearings



Cathleen Parsley
Chief Administrative Law Judge

October 4, 2010

Les Trobman, General Counsel
Texas Commission on Environmental Quality
P.O. Box 13087
Austin Texas 78711-3087

Re: SOAH Docket No. 582-09-3064; TCEQ Docket No. 2008-1888-UIC; Application of Uranium Energy Corporation for Class III Injection Well Permit No. UR03075, for Aquifer Exemption, and for Production Area Authorization No. 1 in Goliad County, Texas

Dear Mr. Trobman:

I have reviewed Goliad County's unopposed request to extend the deadline for filing exceptions and replies to exceptions to my Proposal for Decision, and I have no objection to the extension of the dates to October 22, 2010, and November 1, 2010, respectively.

Sincerely,

A handwritten signature in cursive script that reads "Richard R. Wilfong".

Richard R. Wilfong
Administrative Law Judge

RRW/sh
cc: Mailing List

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SOAH DOCKET NUMBER: 582-09-3064
REFERRING AGENCY CASE: 2008-1888-UIC

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SOAH DOCKET NO. 582-09-3064
TCEQ DOCKET NO. 2008-1888-UIC

APPLICATION OF URANIUM	§	BEFORE THE STATE OFFICE
ENERGY CORP FOR CLASS III	§	
INJECTION WELL PERMIT NO.	§	
UR03075, FOR AQUIFER	§	OF
EXEMPTION, AND FOR	§	
PRODUCTION AREA	§	
AUTHORIZATION NO. 1 IN	§	
GOLIAD COUNTY, TEXAS	§	ADMINISTRATIVE HEARINGS

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**SOAH DOCKET NO. 582-09-3064
TCEQ DOCKET NO. 2008-1888-UIC**

APPLICATION OF URANIUM ENERGY CORP FOR CLASS III INJECTION WELL PERMIT NO. UR03075, FOR AQUIFER EXEMPTION, AND FOR PRODUCTION AREA AUTHORIZATION NO. 1 IN GOLIAD COUNTY, TEXAS	§ § § § § § § §	BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARINGS
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PROPOSAL FOR DECISION

Uranium Energy Corporation (UEC) seeks approval from the Texas Commission on Environmental Quality (Commission or TCEQ) for three applications to conduct *in situ* uranium mining at a location in Goliad County.¹ Protestants opposing UEC's applications are two units of government, Goliad County and the Goliad County Groundwater Conservation District (District). The Office of Public Interest Counsel (OPIC) opposes the applications, and the Commission's Executive Director (ED) supports them. For purposes of efficiency, all of the parties requesting denial are sometimes collectively referred to as "Protestants." After considering the evidence and arguments presented, the Administrative Law Judge (ALJ) concludes that there remain unresolved issues which preclude a recommendation that the applications be granted at this time. Therefore, the ALJ recommends that the applications either be denied or remanded for additional actions to be taken and additional evidence received.

Specifically, as discussed in detail concerning Issue G below, the ALJ recommends that additional evidence be developed and made part of the record as to whether: (1) the Northwest Fault is sealed² or transmissive,³ and (2) if proven to be transmissive, whether with proper safeguards, both ground and surface water can be protected from pollution if *in situ* uranium

¹ One of the three applications is for a Production Area Authorization (PAA), TCEQ Docket No. 2009-1319-UIC, *Application by Uranium Energy Corp. for Production Area Authorization No. 1*. SOAH assigned that application SOAH Docket No. 582-09-6184. That docket was then consolidated with this SOAH Docket No. 582-09-3064.

² An impervious barrier to the movement (migration) of groundwater.

³ Permeable.

mining is allowed. In addition, the ALJ recommends that baseline groundwater quality and the restoration table be amended to reflect the average of all three rounds of sampling for all constituents. This would necessitate other changes before permits could be issued, but would not necessarily require a remand.

I. INTRODUCTION

UEC has requested the Commission's approval for: (1) a Class III Underground Injection Control area permit, Permit No. UR03075; (2) an aquifer exemption (collectively, the Mine Application); and (3) a PAA, Authorization No. UR03075PAA1 (the PAA-1 Application). The three applications, if approved, would authorize UEC to conduct an *in situ* uranium mining operation 13 miles north of the City of Goliad. The ED reviewed the applications and concluded that the applications meet all legal standards. The ED prepared for the Commission's approval a draft Mine Permit, an Aquifer Exemption Order, and a PAA. If the applications were approved, they would set the conditions under which UEC would be permitted to conduct the *in situ* uranium mining.

After the Protestants filed their protests, the Commission referred these issues to SOAH for a contested case hearing:

- A. Whether the use and installation of the injection wells are in the public interest under TEX. WATER CODE § 27.051(a). Public interest in regard to this issue includes whether UEC's mining operation or restoration activities will adversely impact the public interest by unreasonably reducing the amount of groundwater available for permitting by the Goliad County Groundwater Conservation District.
- B. Does the applicant's compliance history require denial of the application under TEX. WATER CODE § 27.051(e) and 30 TEX. ADMIN. CODE (TAC) Ch. 60?
- C. Does the application adequately and accurately describe baseline conditions of the groundwater in the proposed permitted area under applicable requirements of 30 TAC Ch. 331?
- D. Does the application meet all applicable criteria of 30 TAC § 331.122, related to required consideration by the Commission prior to issuing a Class III Injection Well Area Permit?

- E. Has the applicant demonstrated that the proposed exempted aquifer meets the applicable criteria of 30 TAC § 331.13?
- F. Is the application sufficiently protective of groundwater quality?
- G. Does the application adequately characterize and describe the geology and hydrology in the proposed permit area, including fault lines, under the applicable rules?
- H. Do the geologic and hydraulic properties of the proposed permit area indicate that the applicant will be able to comply with rule requirements?
- I. Does the applicant meet the applicable requirements for financial assurance under TEX. WATER CODE §§ 27.051 and 27.073, and 30 TAC Ch.37 and 331?
- J. Is the application sufficiently protective of surface water quality?
- K. Are local roadways sufficient to handle traffic to and from the proposed facility?
- L. Whether UEC's proposal for restoration of groundwater to baseline levels as contained in the permit application is reasonable and adequate?
- M. Will the applicant's proposed activities negatively impact livestock and wildlife, including endangered species?
- N. Will the applicant's proposed activities negatively impact the use of property?
- O. Will the applicant's proposed activities adversely affect public health and welfare?
- P. Whether the proposed mining is in the recharge zone of the Gulf Coast Aquifer (Evangeline component)?
- Q. Whether the Gulf Coast Aquifer is a confined aquifer in the areas of Goliad County where UEC will conduct UIC [underground injection control] activities?
- R. Whether mining fluids will migrate vertically or horizontally and contaminate an USDW [underground source of drinking water]?
- S. Whether there are any USDWs within the injection zones proposed by UEC?

- T. Whether any USDWs within Goliad County will be adversely impacted by UEC's proposed *in situ* uranium operations?
- U. Whether there is a "practical, economic and feasible alternative to an injection well reasonably available" within the meaning of that term as set forth in TEX. WATER CODE § 27.05(d)(2)?

In addition, the Commission referred directly to SOAH UEC's PAA-1 Application. The issue in that referral was whether the application complies with all applicable statutory and regulatory requirements.

II. PARTIES AND PROCEDURAL HISTORY

These were the parties and their representatives who participated in the hearing of this case:⁴

Party	Representative
UEC	Monica Jacobs and Diana Nichols, Attorneys, Austin, Texas
Goliad County	James B. Blackburn and Adam M. Friedman, Attorneys, Houston, Texas
District	Rob Baiamonte, Attorney, Goliad, Texas
ED	Shana Horton, Staff Attorney, TCEQ
OPIC	Garrett Arthur, Attorney

In its Interim Order of March 3, 2009, the Commission established a deadline to complete this case within one year of the first preliminary hearing. SOAH held a preliminary hearing on May 14, 2009. Immediately after the preliminary hearing, the ALJ set a procedural schedule to

⁴ These persons were designated as parties but did not participate in the hearing: Raymond V. Carter, Tom E. Stockton, Mona Samford and Sidney Braquet, aligned with UEC; and Goliad County Farm Bureau, individually and as representative of the following aligned protestant entities and land owners: Ander-Weser Volunteer Fire Department, Mary and Tom Anklam, Raymond and Karon Arnold, Aldon and Brenda Bade, Mickey and Elizabeth Beard, Richard and Catherine Bettge, Otto and Ruth Bluntzer, Matt and Erika Bochat, Gene and Reta Brown, John and Pearl Caldwell, Lynn and Ginger Cook, Luann and Craig Duderstadt, Darwyn and Waynell Duderstadt, Wilburn and Doris Duderstadt, Douglas and Wanda Franke, Mary Kathryn Bluntzer Gray, Joel and Jana Grieser, Brenda Jo Hardt, Ernest and Frances Hausman, Gaylon and Barbara Kornfuehrer, Ted and Pam Long, Ricki McKinney, Mr. and Mrs. Jason Mikeska, Susan and Weldon Orr, Margaret Rutherford, Wayne and Margie Smith, St. Peter's Lutheran Church, and Dorian and Carol Thurk.

meet the Commission's one-year deadline. Over the next few months, the parties filed joint or unopposed motions to extend the schedule and the Commission's deadline. The ALJ granted these requests as part of his authority under to 30 TAC § 80.4(c)(17).

These were the key procedural events in this case:

Date	Event
August 9, 2007	UEC filed its Mine Application with TCEQ.
August 29, 2007	UEC's Mine Application was declared administratively complete.
June 4, 2008	The ED made a preliminary decision that the Mine Application meets all statutory and regulatory requirements and issued a draft Mine Permit and a draft Aquifer Exemption Order.
September 4, 2008	UEC filed its PAA-1 Application with TCEQ.
September 19, 2008	TCEQ made an official determination that the PAA-1 Application was administratively complete.
March 3, 2009	TCEQ issued an Interim Order granting requests for a contested hearing on UEC's Mine Application filed by Goliad County, GCGCD, and others, and referred the case to SOAH.
May 14, 2009	SOAH held a preliminary hearing in Goliad, Texas, established jurisdiction over the Mine Application, designated parties, established a procedural schedule, and set a hearing on the merits to be commenced on January 4, 2010. The procedural schedule was later extended based on agreed or unopposed motions filed by the parties.
June 2, 2009	The ED made a preliminary determination that the PAA-1 Application meets all statutory and regulatory requirements.
June 9, 2009	The ED issued a draft PAA.
August 14, 2009	UEC filed a request for direct referral of the PAA-1 Application to SOAH for a contested case hearing.
September 29, 2009	UEC filed an Agreed Motion to Consolidate the PAA-1 Application with the Mine Application.
October 6, 2009	SOAH held a preliminary hearing in Goliad, Texas, established jurisdiction over the PAA-1 Application and designated parties.
October 8, 2009	SOAH granted the Motion to Consolidate.
October 26, 2009	SOAH granted UEC's unopposed motion to abate the proceeding to make minor amendments to the Mine Application and PAA-1 Application.
December 18, 2009	SOAH established a new procedural schedule and set the hearing on the merits for May 3, 2010.
April 30, 2010	Prehearing Conference.

Date	Event
May 3-11, 2010	Hearing on the Merits.
July 9, 2010	Parties filed Closing Arguments.
July 30, 2010	Parties filed Replies to Closing Arguments and the record closed.

III. NOTICE AND JURISDICTION

No party contested proper notice or jurisdiction. These matters will be addressed in the findings of fact and conclusions of law in the proposed order.

IV. BACKGROUND: *IN SITU* MINING

A. Mining Overview

UEC proposes to mine uranium deposits found in the Goliad Formation, a stratum of sand and sandstone within the local aquifer. To extract the ore, UEC proposes to conduct *in situ* mining. Using extraction wells, native groundwater is pumped to the surface where the water is fortified with oxygen and sodium bicarbonate. This solution, known as mining solution or lixiviant, is re-injected into the uranium bearing sand, known as the production zone. The lixiviant then oxidizes the uranium, allowing it to move into solution. After the uranium is solubilized, it combines or “complexes” with the bicarbonate, which traps the uranium in solution until it is pumped to the surface and removed from the mining solution at the plant.

The uranium-bearing mining solution (or “pregnant” lixiviant) is passed through pressurized vessels that contain ion-exchange resin beads. These beads are designed to attract and hold the uranium compound on the beads, thus removing it from the solution. After the uranium is removed from the mining solution (“barren” lixiviant) is then re-fortified with oxygen and sodium bicarbonate and re-injected into the production zone (i.e., the mining solution is re-circulated). A small amount of the barren lixiviant – approximately 1% -- is diverted from the production area for disposal in a Class I disposal well. This is known as “bleed.” Bleed maintains a negative pressure on the groundwater and creates a “cone of depression.” By

maintaining this status, the mining operation retains the groundwater and the dissolved solids within the production area and prevents them from flowing into other areas in the aquifer. The mining operation is required to restore the groundwater within the production area to its original baseline status after the mining is completed, and to monitor the site through the use of monitor wells.⁵

B. Permits

To begin these operations, a mining operation must receive from the Commission: (1) an underground injection permit to establish a mine and begin mining operations, (2) an aquifer exemption to conduct mining activities within an aquifer, and (3) a PAA, an administrative designation of a production area within the boundary of the approved mining area.

1. Class III Underground Injection Permit

UEC applied to the Commission for a new Class III underground injection control area permit. The proposed mining activity would be conducted about 13 miles north of the City of Goliad and 0.9 miles east of the intersection of State Highway 183 and Farm-to-Market Road 1961 in Goliad County. The Class III area permit would authorize UEC to construct and operate Class III injection and production wells for recovery of uranium from a certain portion of the Goliad Formation beneath the permit area. The area within the proposed permit boundary is 1,139.4 contiguous acres, including a 100-foot buffer zone.⁶

2. Aquifer Exemption

UEC's Class III application includes a request for an aquifer exemption. An aquifer exemption is an administrative order by the Commission establishing that the part of the aquifer

⁵ UEC Ex. 5, Underdown Direct at 5-7.

⁶ Designated monitor wells shall be installed at least 100 feet inside any permit area boundary, unless excepted by written authorization from the executive director. 30 TAC § 331.82(g).

in which mining is to be conducted will not serve as a source of drinking water for human consumption. Until the exempt status is removed, the aquifer may not serve as a source of drinking water for human consumption.⁷ For this application, the requested aquifer exemption would apply from a depth of 45 to 404 feet within the Goliad Formation and would encompass a 423.8 acre area within the proposed permit area.

3. PAA Application

UEC also filed a PAA-1 Application to authorize mining and restoration in proposed Production Area No. 1 within the Class III permit area. Proposed PAA-1 covers 36.1 acres within a 94.2 acre mine area on the southern portion of the proposed permit area. The draft PAA would be issued under the terms of the proposed Class III injection well area permit. The draft PAA includes: a mine plan with estimated schedules for mining and aquifer restoration, a baseline water quality table, a restoration table, control parameter upper limits, monitor well locations, and cost estimates for aquifer restoration and well plugging and abandonment.

V. APPLICABLE LAW

In 1982 the federal Environmental Protection Agency (EPA) authorized Texas' plan to implement provisions of the federal Safe Drinking Water Act. The Texas legislature adopted Chapter 27 of the Texas Water Code to delegate to the Commission the statutory authority to approve mining operations within an aquifer. Section 27.003 of the Injection Well Act sets the state's policy about injection wells:

POLICY AND PURPOSE. It is the policy of this state and the purpose of this chapter to maintain the quality of fresh water in the state to the extent consistent with the public health and welfare and the operation of existing industries, taking into consideration the economic development of the state, to prevent underground injection that may pollute fresh water, and to require the use of all reasonable methods to implement this policy.⁸

⁷ 30 TAC § 331.13(c)(1) and (2).

⁸ *Id.* § 27.003 (Vernon 2008).

Subchapter D of the Injection Well Act governs the issuance of permits for injection wells.⁹ Section 27.051(a) of Subchapter D of the Injection Well Act provides that TCEQ may grant an application in whole or in part and may issue the permit if the TCEQ finds that:

- (1) the use or installation of the injection well is in the public interest;
- (2) no existing rights, including, but not limited to, mineral rights, will be impaired;
- (3) with proper safeguards, both ground and surface fresh water can be adequately protected from pollution; and
- (4) the applicant has made a satisfactory showing of financial responsibility if required by Section 27.073 of the code. . . .¹⁰

As part of this same regulatory scheme, Section 27.051(c) requires the TCEQ to impose terms and conditions “reasonably necessary to protect fresh water from pollution.”¹¹

The TCEQ has adopted rules that govern its administration of the injection well program. In 30 TAC ch. 331, the TCEQ provides for the review of requests for the issuance of Class III injection well permits, applications for PAAs, and requests for exemption designations of aquifers. Chapter 331 underwent significant revision during the pendency of this proceeding. Those revisions, including new and amended rules, effective March 12, 2009, applied to this proceeding.¹²

The purpose of Chapter 331 is:

. . . to implement the provisions of the Injection Well Act, Texas Water Code, Chapter 27, as it applies to the commission. The implementation shall be consistent with the policy of this state to: maintain the quality of fresh water in the state to the extent consistent with the public health and welfare and the

⁹ *Id.* §§ 27.051-.056 (Vernon 2008 & Supp. 2009).

¹⁰ *Id.*

¹¹ TEX. WATER CODE ANN. § 27.051(c) (Vernon 2008).

¹² 30 TAC § 305.127(4)(B).

operation of existing industries, taking into consideration the economic development of the state; prevent underground injection that may pollute fresh water; and require the use of all reasonable methods to implement this policy.¹³

Consistent with the policy of the statute, the rules require that: (1) no existing rights may be impaired,¹⁴ (2) fresh water be adequately protected from pollution,¹⁵ (3) applicants make a satisfactory showing of financial responsibility,¹⁶ and (4) the injection wells be otherwise in the public interest.¹⁷

VI. ISSUE A

Whether the use and installation of the injection wells are in the public interest under TEX. WATER CODE § 27.051(a). Public interest in regard to this issue includes whether UEC's mining operation or restoration activities will adversely impact the public interest by unreasonably reducing the amount of groundwater available for permitting by the Goliad County Groundwater Conservation District?

Recommendation:

UEC's proposed use and installation of the injection wells are in the public interest, subject to the revision of the baseline water quality table and restoration table for PAA-1 to reflect baseline water quality based on the average of all three rounds of sampling for all constituents. This recommendation is also based on the provisions of TEX. WATER CODE § 27.051(a) and is further addressed in Sections VIII and XVI analyzing Issues C and L and in Section XXVII B. analyzing PAA-1.

A. Parties' arguments

1. UEC

UEC argued that the public interest should be determined based on an analysis of the Injection Well Act and the decision of the Austin Court of Appeals in *Texas Citizens for a Safe*

¹³ 30 TAC § 331.1(a).

¹⁴ See *infra*, Section I.E.

¹⁵ See *infra*, Section I.F.

¹⁶ See *infra*, Section I.G.

¹⁷ See *infra*, Section I.D.

Future and Clean Water v. Railroad Comm'n of Texas,¹⁸ (commonly referred to as the *Popp* case). Based on these sources, UEC delineated what it believes are the five considerations relevant to the public interest: (1) continued operation of existing industries and recovery of natural resources; (2) availability of alternatives to the use of an injection well; (3) economic development; (4) public health and welfare, including: protecting fresh water from pollution, protecting air from pollution, protecting soil and vegetation from contamination, traffic safety, and groundwater availability; and (5) the applicant's compliance history.

a. Continued Operation of Existing Industries and Recovery of Natural Resources

UEC argued that its applications will help supply energy for the United States. Because energy independence is part of the public policy of this country, UEC is helping to satisfy the public interest. Energy demand in the United States is expected to grow by almost 50% by 2030. To keep pace with this growth, the National Energy Policy recommends expanding the role of nuclear energy. UEC's argument was that the uranium mining industry, which has been a part of the Texas economy for decades, is a vital component for sustaining the growing nuclear power plant industry in Texas and throughout the United States.¹⁹

In addition, UEC's expert witness and geologist, Dr. William Galloway, testified that uranium is found in a limited number of places.²⁰ Although uranium ore is distributed worldwide, only twenty-one countries export it.²¹ The South Texas Uranium Province is one of only three significant uranium ore reserves within the United States.²²

UEC argued that the public interest is served by its development of the uranium ore reserves in Texas. In addition, UEC argued that the Protestants' evidence did not contradict its

¹⁸ 254 S.W.3d 492 (Tex. App.—Austin 2007, pet. granted).

¹⁹ UEC Ex. 6, Holmes Direct, Ex. 13.

²⁰ UEC Ex. 1, Galloway Direct at 16.

²¹ *Id.* at 16.

²² *Id.* at 16.

position. In support of that argument, UEC pointed to the testimony of Goliad County's witness Dr. Bruce K. Darling. Dr. Darling's testimony relied on a United States Geological Survey (USGS) report by Susan Hall (the Hall Study) that describes the importance of Texas' uranium mining industry in meeting national energy demand.²³ The Hall Study states that the United States has been steadily producing uranium using *in situ* recovery mining since the mid-1970s²⁴ and that "Texas has been the location of the greatest number of uranium in-situ recovery (ISR) mines in the United States."²⁵ The study reports that although 38% of U.S. uranium reserves are amenable to *in situ* mining, the United States still imports 82% of its uranium.²⁶ The study concludes that "the safe and effective use of ISR technology in mining uranium deposits is a potentially critical element in the movement towards energy independence in the United States."²⁷ UEC argued that the public interest is served by the development of the state's energy-producing natural resources²⁸ and that UEC's Mine Application is in the public interest and should be granted.

b. Availability of Alternatives to the Use of Injection Wells

UEC argued that there are no practical, economic, and feasible alternatives to the use of injection wells in this case. This argument is more fully addressed in the analysis of Issue U.

c. Economic Development

UEC relied on the public interest demonstration in the Mine Application in arguing that the uranium mining industry "creates a significant number of high-paying, long-term jobs and

²³ Goliad County Ex. 1; Goliad County Ex. 4, Darling Direct at 1 and 4.

²⁴ *Id.* at 4.

²⁵ *Id.* at 1.

²⁶ *Id.* at 4.

²⁷ *Id.*

²⁸ TEX. CONST. art. XVI, § 59 (declaring that "[t]he conservation and development of all of the natural resources of this State" ... [are] public rights and duties"); *Berkeley v. Railroad Comm'n*, 282 S.W.3d 240, 244 (Tex. App. – Amarillo 2009, no pet.) (recognizing increased capacity for oil and gas production as a public interest factor that favors the granting of a permit for a salt water disposal injection well).

contributes to the tax base in the largely rural communities in which it operates.”²⁹ UEC also argued that the South Texas economy would benefit through added economic diversity and good paying jobs if the Goliad Project is approved. UEC estimated that it would employ about 80 workers at the project. UEC challenged the Protestants’ alleged failure to offer direct testimony on how the project would stimulate local economic development. UEC contended that in considering the public interest issue, TCEQ may consider factors such as job creation, generation of local property taxes, and increased local economic activity and diversity.³⁰

d. Protecting Fresh Water from Pollution

UEC argued that fresh water is adequately protected from pollution. This issue is more fully addressed in the analysis of Issues F, G, and J.

e. Protecting Against Air Pollution, Soil and Vegetation Contamination, and Harm to Livestock and Wildlife

UEC argued that its application addresses the protection of air from pollution and soil and vegetation from contamination. UEC also asserted that its proposed *in situ* mining would not negatively impact livestock and wildlife, including endangered species. This issue is more fully addressed in the analysis of Issue M.

f. Traffic Safety

UEC argued that local roadways are adequate to safely handle traffic to and from the proposed mine site. This argument is more fully addressed in the analysis of Issue K.

²⁹ UEC Ex. 6, Holmes Direct Ex. 13 at ix.

³⁰ *Graff Chevrolet Co. v. Tex. Motor Vehicle Bd.*, 60 S.W.3d 154, 161 (Tex. App. – Austin 2001, pet. denied) (upholding board’s determination that new franchise was in the public interest where evidence showed that it would enhance competition, create jobs, and provide a successful minority-run dealership in the community).

g. Groundwater Available for Permitting

UEC plans to use reverse osmosis³¹ during the mining and restoration stages of the operation.³² As explained in the public interest demonstration in the Mine Application, the use of reverse osmosis in both mining and restoration conserves groundwater.³³ UEC plans to use ion exchange columns to remove residual uranium, which will shorten the duration of the restoration period and thus reduce water consumption. UEC will also use groundwater sweep,³⁴ not only to satisfy restoration goals, but also to conserve water.³⁵ Additionally, UEC's projected water consumption—water that will be disposed of down the Class I disposal wells—is between 133 and 206 acre-feet per year.³⁶

UEC argued that the District's Management Plan anticipated the need to plan for groundwater usage for uranium mining purposes.³⁷ The Plan projects 800 acre-feet per year of groundwater usage for such purposes, which is almost *four times* the amount that UEC projects it would use on an annual basis.³⁸ This, argued UEC, demonstrates that the amount of water to be used by UEC can be accommodated by the District.

³¹ Reverse osmosis is a filtration method that removes many types of large molecules and ions from solution by applying pressure to the solution when it is on one side of a selective membrane. The result is that the solute is retained on the pressurized side of the membrane and the pure solvent is allowed to pass to the other side.

³² UEC Ex. 5, Underdown Direct at 22-23; UEC Ex. 6, Holmes Direct at 53-54.

³³ UEC Ex. 6, Holmes Direct, Ex. 13 at ix.

³⁴ The injection of lixiviant is stopped but fluid continues to be pumped from recovery wells. This removes contaminated water and brings uncontaminated groundwater into the ore body aquifer. The removed contaminated water is disposed of by injection into a disposal well.

³⁵ UEC Ex. 6, Holmes Direct at 54-55.

³⁶ UEC Ex. 7, Holmes Issue A Rebuttal at 3.

³⁷ See, District Ex. 2, Dohmann "A" (Goliad County Groundwater Conservation District's Management Plan).

³⁸ *Id.* at 13.

2. Protestants

Goliad County pointed out there are no TCEQ regulations defining “public interest.” Then, relying heavily on the “shall not be limited to” language in TEX. WATER CODE § 27.051(d) and the holdings in the *Popp* case and other relevant case law,³⁹ Goliad County advocated that the Commission should interpret the public interest standard very broadly. Goliad County also noted that it is aware of only one other environmental law that has an affirmative regulatory requirement to consider the public interest and that is Section 10 of the River and Harbor Act administered by the U.S. Army Corps of Engineers. Under this regulation the concept of public interest requires a “balancing of interests.” In other words, the positives and negatives are considered.⁴⁰ Goliad County argued that many of the other Commission-referred issues should be considered in conducting the overall public interest review.

Goliad County then focused on three concerns: (1) the manner in which the TCEQ staff addressed public interest concerns; (2) UEC’s compliance record; and (3) the balance between the risk to Goliad County and its water supply and the development of mineral resources and economic development. The District supported Goliad County’s position with respect to criticism of the ED’s public interest assessment and the risk of permanent harm to Goliad County’s groundwater quality. Additionally, the District asserted that the proposed *in situ* mining will adversely impact the amount of groundwater available for permitting.

a. ED’s Inadequate Consideration of Public Interest

Both Goliad County and the District argued that the ED failed to analyze the public interest as required by the Texas Water Code or the holding of the Austin Court of Appeals in the *Popp* decision. To demonstrate that failure, Protestants referred to the testimony of the ED’s witness, David Murry:

³⁹ *Texas Citizens for a Safe Future & Clean Water v. R.R. Comm’n*, 254 S.W.3d 492, 502 (Tex. App. – Austin 2007); *Berkley v. R.R. Comm’n*, 282 S.W.3d 240, 244 (Tex. App. – Amarillo 2009).

⁴⁰ 33 Code of Federal Regulation (CFR) 320.4.

Q: (by Mr. Blackburn). Now, did you consider the fact that there could be some negative aspects to the public interest?

A: (by Mr. Murry). No.

Q: (by Mr. Blackburn). So just in terms of your evaluation of public interest, you did not consider even the possibility there could be a negative aspect on the public interest? Did I understand your testimony that way?

A: (by Mr. Murry). Yes. What --- excuse me. Yes. I mean, what I looked at, again, was the information provided in the application, which are, positive aspects of in-situ uranium mining, or of allowing the use of Class 3 injection wells for uranium mining, I should say.

Q: (by Mr. Blackburn). So all you considered in your review were positive aspects provided by the applicant, correct?

A: (by Mr. Murry). Correct.⁴¹

According to Protestants, this testimony demonstrated that no attempt was made by the TCEQ staff to undertake any balancing approach or even consider public safety or other potential negative impacts in making a determination whether the proposed *in situ* uranium mining is in the public interest. Based on this and other testimony in the record, Protestants asserted that testimony offered by the TCEQ should be rejected as failing to reflect the standard for public interest consideration required by the Texas Water Code.

b. Risks to Goliad County Ground Water

Protestants argued that the mining operations would present a risk of permanent harm to groundwater.⁴² As part of that argument, Protestants asserted that it was highly unlikely that UEC would restore the groundwater at the mine site after mining ceases. As proof of this assertion, Goliad County noted the testimony of Craig W. Holmes, UEC's lead witness, who testified that he had worked on 80% of the mine sites in Texas and that none of them were fully

⁴¹ Tr., Vol. 6 at 1233 – 1234 (Murry).

⁴² This is addressed in greater detail under Issue L below.

restored.⁴³ Similarly, William Underdown, a UEC employee, testified that his experience with unsuccessful restoration had been the same.⁴⁴ Mr. Underdown stated on cross-examination that UEC “will attempt to get every constituent back, but there is a certain point when you will reach . . . [and] at that time you petition the agency to give you an amendment.”⁴⁵

Protestants contended the evidence showed that the contaminated groundwater produced by the mining operations will not be restored to baseline conditions and that high levels of harmful constituents will remain in the groundwater when the mining is completed. Protestants argued that the evidence of past restoration attempts showed that reclamation efforts by UEC, if a permit is issued, will likely fail to restore the water to baseline levels. This failure, argued Protestants, is an exceptionally important factor in the determination that UEC’s mining operations would not be in the public interest.

c. UEC’s Compliance History

As will be addressed in greater detail with respect to Issue B, Goliad County argued that UEC repeatedly violated Texas Railroad Commission (TRC) rules during its exploration drilling activities at the proposed mine site. Goliad County claimed that UEC failed to restore the surface of 74 of 117 mud pits,⁴⁶ failed to mark and locate many boreholes, and failed to properly plug 5 of the 14 boreholes that were found.⁴⁷ Goliad County asserted that 22 of UEC’s exploration borehole sites had radiation levels that were above background levels and that 139 exploration boreholes were left open beyond the 48-hour time period within which they were required to conduct plugging operations.⁴⁸ Eighteen of UEC’s 20 exploration boreholes that were converted to baseline water quality wells were not cased within the required 48-hours.⁴⁹

⁴³ Tr., Vol. 1 at 248 – 249 (Holmes).

⁴⁴ Tr., Vol. 1 at 213 – 214 (Underdown).

⁴⁵ Tr., Vol. 1 at 192 – 23 (Underdown).

⁴⁶ Goliad County Ex. 4, Darling Direct, Ex. 3. (Notice of Violation).

⁴⁷ *Id.*

⁴⁸ Goliad County Ex. 4, Darling Direct at 11-27.

⁴⁹ Goliad County Ex. 4, Darling Direct at 12-14; *Id.* at 12 – 22; *see also, Id.* at Darling Direct, Ex. 8.

Goliad County pointed to this record as evidence of the potential for environmental harm that UEC would continue to create for Goliad County residents if UEC were allowed to conduct *in situ* mining activities.

Goliad County further asserted that UEC failed to give the TCEQ staff the results of an important 24-hour pump test. The test, conducted by UEC, had shown that the Northwest Fault, underlying the Goliad Formation, could be transmissive—that is, allow polluted water from the *in situ* mining operations to leak into the part of the groundwater used for human consumption.⁵⁰ Goliad County argued that not only was this information relevant to the merits of the Mine Application, the information contradicted evidence offered by UEC.

Further, Goliad County pointed out that TCEQ rules require that “where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in an application, or in any report to the Executive Director, it shall promptly submit such facts or information,”⁵¹ and UEC failed to do so. Similarly, Goliad County alleged, UEC failed to provide the ED with the results of the second and third rounds of baseline water quality sampling. This sampling, according to Goliad County, showed a significant decrease in the baseline concentration of uranium, an outcome to which UEC should be held when restoring the groundwater to its pre-mining condition, if the application were approved.⁵²

In conclusion, Goliad County asserted that it is essential that an applicant’s compliance history be reviewed by the Commission. Only by examining an applicant’s history of compliance may the Commission determine the character of an applicant who seeks authority to undertake risk at the expense of the public. Goliad County contended that the Commission should not grant rights or delegate responsibilities to UEC because it has demonstrated that it cannot be trusted to discharge its obligations when a permit is issued.

⁵⁰ Tr., Vol. 7 at 89 (Murry).

⁵¹ 30 TAC § 305.125(19).

⁵² This is addressed in greater detail under Issue C below.

d. Availability of Ground Water for Permitting

The District's expert hydrologist Thomas N. Blandford⁵³, P.G., testified that water lost through the mining and restoration processes will limit the availability of groundwater outside the permit area:⁵⁴

Q: Do you have an opinion whether the groundwater used by UEC would have an effect on GCGCD's ability to manage the groundwater in the area surrounding the permit?

A: Yes I do.

Q: What is your opinion?

A: The GCGCD Management Plan and Rule 12.6 of the GCGCD Rules state that the GCGCD is to manage groundwater in the Gulf Coast Aquifer on a sustainable basis, where the groundwater available for use equals the estimated recharge to the aquifer. The GCGCD has implemented multiple rules to achieve this goal, one of the most important being Rule 12.6(3), which limits production volumes to 0.5 acre-foot per acre per year. Since UEC is not required to obtain an operating permit from the GCGCD in order to mine, the GCGCD will be denied the opportunity to appropriately permit and manage UEC's groundwater use. If mining proceeds, it is highly likely that the production limits of Rule 12.6(3) will be exceeded.

Q: Why do you believe that GCGCD Rule 12.6(3) will be exceeded?

A: Based on the proposed area of aquifer exemption of 423.8 acres, under GCGCD rules about 212 acre-ft per year of water would be appropriable (*i.e.* 423.8 acres times 0.5 acre-ft per acre), which is about 130 gallons per minute (gpm). However, UEC can reasonably be expected to use their full permitted deep well disposal capacity of 200 gpm, which is about 70 gpm greater than the maximum amount of water that the GCGCD would appropriate in accordance with their rules. This scenario will essentially cause the GCGCD to consider acreage adjacent to UEC as unavailable for new appropriation, in an amount sufficient to offset the "over-utilization" of groundwater by UEC. The potential restrictions that the GCGCD would be required to impose on property adjacent to the UEC operation, in order to offset the effects of UEC's use, would constitute an unreasonable reduction in the amount of groundwater available for permitting by GCGCD.

⁵³ Dr. Blandford's name is spelled with and without a "d" in various places in the evidentiary record. For consistency, this PFD uses "Blandford."

⁵⁴ District Ex. 3, Blandford Direct at 6-7.

The District concluded that the proposed project will adversely impact the District's ability to permit groundwater. Specifically, the District claimed that it will be required to limit groundwater pumping outside the permit area to be able to maintain the integrity of the mine project and to sustain the level of the aquifer. Citing TEX. WATER CODE § 27.051(a)(2) for the proposition that the Commission can issue a permit only if no existing rights will be impaired, the District argued that the reduction in the amount of groundwater available for permitting by the District is an impairment of an existing right. Moreover, according to the District, the reduction in the amount of groundwater available to the citizens of Goliad County constitutes another impairment of an existing right. Thus, the District contended UEC failed to demonstrate that its *in situ* mining project is in the public interest.

3. OPIC

OPIC noted that the District is obligated to protect the groundwater resources of Goliad County. Relying on the testimony of the District's witness, Arthur Dohmann, OPIC asserted that UEC's mining operation would result in the loss of 1,169 acre-feet of groundwater from the aquifer per year, a volume that greatly exceeds the amount that UEC would be allowed under the District's rules. Accordingly, if UEC were allowed to conduct the proposed mining operation, the District would be forced to restrict the use of water by landowners adjacent to UEC's mine site. Thus, adjoining groundwater users would pay the price for UEC's over-utilization of groundwater. OPIC concluded that UEC's proposed *in situ* mining and restoration activities will unreasonably reduce the amount of groundwater available for permitting by the District; therefore, UEC's proposed injection wells are not in the public interest as required by TEX. WATER CODE § 27.051.

4. Executive Director

The ED supported a finding that UEC's Mine Application and the ED's draft permits are in the public interest. The ED explained that in a response to a Notice of Deficiency,⁵⁵ UEC provided information regarding how the wells contemplated by the Class III area permit are in the public interest. The response addressed compliance history, alternatives to the use of an injection well, maintenance of the quality of freshwater and prevention of its pollution, public health and welfare, and economic development.⁵⁶ Based on his review of this information, the ED determined that the application satisfied the requirements of the statute.

The ED also evaluated UEC's compliance history in accordance with the Texas Water Code and TCEQ rule.⁵⁷ Based on that review, the ED asserted that UEC's compliance history does not tend to show that granting the Mine Application would be against the public interest.

UEC presented surface and underground mining as alternatives to the use of injection wells in its response to the NOD. The ED concluded that neither would be in the public interest.⁵⁸

The ED evaluated whether the proposed *in situ* mining activity would unreasonably reduce the amount of groundwater available for permitting by the District. The ED concluded that the Class III injection well requirements that apply to *in situ* mining do not regulate the volume of fresh water used by a permittee. The rules do not require applicants to provide any direct information about the amount of water they will use from the aquifer. Nonetheless, the application does include some information that is related to this issue. The ED pointed out that in Section 10 of its application, UEC provided an analysis of the fluid handling capacity and the fluid disposal requirements for its proposed *in situ* mining operation. The ED further pointed out

⁵⁵ ED Ex. ED-4, Notice of Deficiency dated Jan. 7, 2008.

⁵⁶ UEC Ex. 6, Holmes Direct, Ex. 13, Class III UIC application, Project Overview at x-xiii.

⁵⁷ 30 TAC Ch. 60.

⁵⁸ Tr., Vol. 6 at 133-141 (Murry).

that based on Table 10.1 of the application, UEC expects to dispose of 380,783,976 gallons (1,169 acre-feet) of water over a period of about 8 years, the projected life of the operation. The maximum projected fluid disposal rate would be 5,612,000 gallons a month. The ED reviewed this data and concluded that UEC's projections of water use are reasonable.⁵⁹

The ED argued that although the District has the power to issue permits regulating the pumping of groundwater under Chapter 36 of the Texas Water Code Section 36.117(l) specifically states that the Texas Water Code does not apply to production or injection wells drilled for uranium. Therefore, the District does not have the authority to restrict UEC's groundwater use for its proposed uranium mining activities. Even so, the ED emphasized that under the District's rule restriction of 0.5 acre-feet per acre per year,⁶⁰ UEC would be allowed to pump 212 acre-feet per acre per year from the 423.8-acre aquifer exemption area. Thus, the ED found it very significant that UEC's estimated water use over the life of the project and projected maximum monthly water use⁶¹ are *projected to fall within the limits of the District's current rule*.

B. ALJ's Analysis and Recommendation

The ALJ finds that UEC's proposed installation and use of Class III injection wells for *in situ* mining of uranium are in the public interest, in accordance with the criteria in TEX. WATER CODE § 27.051(a). Uranium, in contrast with oil and gas, is a very scarce natural resource. It exists in commercially mineable concentrations in only a few areas of the United States, including Goliad County, Texas. It is in the public interest for this natural resource to be produced to meet the energy needs of the United States, and for the mineral owners to realize the economic benefits of uranium production on their property. The ALJ additionally finds that UEC's mining operation and restoration activities will not unreasonably reduce the amount of groundwater available for permitting by the District. The ALJ further disagrees with Protestants'

⁵⁹ ED Ex. ED-10 at 39.

⁶⁰ District Ex. 2, Dohmann Direct at 8.

⁶¹ UEC Ex. 6, Holmes Direct, Ex. 13, PAA1 application, table 7.2.

claim that the ED failed to undertake a balancing approach or consider potential negative impacts in making a determination of public interest. However, the ALJ raises the *caveat* that if the Northwest Fault is proven to be transmissive, upon further testing as recommended by the ALJ, and the preponderance of the evidence is also negative as to whether with proper safeguards, both ground and surface water can be protected from pollution due to the nature of the fault, that would, of course, tip the public interest scale toward a finding that the proposed *in situ* uranium mining is not in the public interest.

In major part, Protestants rely on the quoted testimony of Mr. Murry to support their criticism of the scope of the ED's consideration of the public interest.⁶² But, the Protestants ignore Mr. Murry's further testimony that, in addition to information provided by UEC, he "also considered the comments from the public and still came to the conclusion that [granting the application] was in the public interest."⁶³ Additionally, a review of the ED's response to public comments shows that the ED considered a wide range of issues regarding public interest, including: economic impacts and quality of life, land use and mine site selection, health and welfare, groundwater quality, geology/hydrology of the aquifer, monitoring, control of migration of mining fluids, aquifer restoration, financial assurance, and compliance history.⁶⁴ Mr. Murry also testified that he reviewed the Mine Application to ensure that UEC would meet all regulatory requirements.⁶⁵

Moreover, Protestants' assertion that the ED failed to take a "balancing approach" or consider potential negative impacts, ignores that TCEQ rules require TCEQ to implement Chapter 27 of the Texas Water Code in a manner "consistent with the policy of this state to: maintain the quality of fresh water in the state to the extent consistent with the public health and welfare and the operation of existing industries, taking into consideration the economic development of the state; prevent underground injection that may pollute fresh water; and require

⁶² Tr., Vol. 6 at 1233-1234 (Murry).

⁶³ Tr., Vol. 6 at 1235 (Murry).

⁶⁴ ED Ex. ED-10 at 7.

⁶⁵ Tr., Vol. 1 at 37-38 (Murry).

the use of all reasonable methods to implement this policy.”⁶⁶ The rules clearly require a “balancing approach.” Considering all the evidence, the ALJ concludes that the ED properly determined that UEC’s Mine Application is in the public interest consistent with the policy of the state as defined by the Legislature.

Further, the ALJ finds the ED’s arguments and authorities persuasive that the Protestants and OPIC go too far with their positions that the proposed *in situ* mining will unreasonably reduce the amount of groundwater available for permitting by the District. The ALJ concurs with the ED that while this issue was specifically referred by the Commission, the scope of the public interest consideration must be appropriately limited so that it does not conflict with other law.

The District posited that if it is forced to curtail groundwater pumping for properties adjacent to the site, the value of those properties would be diminished and thus, the groundwater use proposed by the Applicant would result in the taking of a property right.⁶⁷ It states in its Closing Argument: “The loss of one’s right to pump groundwater, in order to maintain the integrity of the mine project, without any compensation, clearly violates § 27.051(a)(2) of the Water Code.”⁶⁸ However, the ALJ observes in agreement with the ED that this argument this argument is inconsistent with Texas groundwater law. In Texas, groundwater law is based upon the “rule of capture,” which essentially states that absent malice or willful waste, landowners have the right to take all the water they can capture under their land and do with it what they please, and they will not be liable to neighboring landowners even if in so doing they deprive their neighbors of the water’s use.⁶⁹ There is no law that prohibits one party from pumping so much water that it decreases the amount of groundwater available to others; conversely, while a

⁶⁶ 30 TAC §331.1(a).

⁶⁷ District Closing Argument at 6-7.

⁶⁸ *Id.* at 7.

⁶⁹ 100 Years of Rule of Capture: From East to Groundwater Management, Report 361, a publication of the Texas Water Development Board, at 1 (2004) (citing *Sipriano v. Great Spring Waters of America, Inc.*, 1 S.W.3d, 75 76 (1999)). (Though Protestants may believe mining use to be wasteful as compared to use for human consumption, use of groundwater for *in situ* mining purposes cannot be deemed wasteful due solely to the purpose of use, as the Water Code explicitly exempts groundwater used for minerals mining from regulation under Chapter 36. Mining use has been sanctioned by the legislature in statute.)

landowner has the right to pump as much groundwater as he can from under his property, he does not have the right to require others to ensure the availability of any amount he wants to pump.

OPIC argues more generally that the permit is not in the public interest because “nearby groundwater users [that are] subject to [the District’s] rules would pay the price for UEC’s overutilization of groundwater.”⁷⁰ However, the ALJ finds that it is contrary to legislative intent and principles of statutory interpretation to interpret a more general statutory requirement, like the public interest, to override more specific law--such as the rule of capture and the exemption from groundwater conservation district regulation of groundwater use for *in situ* mining. Protestants may argue that this should be changed because it can work to the detriment of property owners; however, before the ALJ will consider the rule of capture to have been overridden, the Protestants must cite a source more specific than the general rule that the Commission must consider the public interest.

The ALJ agrees that the public interest is an intentionally broad and undefined term in statute. But this does not mean that every concern voiced by a Protestant is appropriately placed on the public interest scale. The ALJ is persuaded that OPIC and the District have applied the public interest considerations in a manner that is over-broad and inconsistent with other applicable law.

With regard to Protestants, additional public interest arguments, including compliance history, financial assurance, and past failures to restore groundwater to baseline levels, the ALJ incorporates by reference his analyses and recommendations where those issues are specifically discussed concerning Issues B, I, and L.

⁷⁰ OPIC Closing Argument at 4. It appears that OPIC defines “overutilization” as pumping more water than would be allowed under the Goliad County GCD’s rules if the mining use were subject to its regulations.

VII. ISSUE B

Does the Applicant's compliance history require denial of the application under TEX. WATER CODE § 27.051(e) and 30 TAC ch. 60?

Recommendation:

UEC's compliance history does not require denial of UEC's Mine Application under TEX. WATER CODE § 27.051(a) and 30 TAC ch. 60.

A. Parties' Arguments

1. UEC

UEC's witness Mr. Holmes testified that because UEC has no history of operations in Texas, UEC has no TCEQ compliance record.⁷¹ The TCEQ compliance history rules assign an applicant a default compliance history of "average performer." Otherwise, an applicant's compliance history classification is established through a series of steps outlined in 30 TAC § 60.2. UEC emphasized that TCEQ may deny a permit to an applicant who is designated a poor performer or repeat violator, only if the applicant "has an unacceptable compliance history based on violations constituting a recurring pattern of conduct that demonstrates a consistent disregard for the regulatory process, including a failure to make a timely and substantial attempt to correct the violation(s)."⁷²

UEC acknowledged the notice of violation (NOV) issued by the TRC for UEC's alleged exploration drilling violations and responded with two arguments: (1) the NOV issued by the TRC is the only one UEC ever received;⁷³ and (2) NOVs issued by the TRC are not components of an applicant's compliance history at TCEQ.

⁷¹ UEC Ex. 6, Holmes Direct at 55.

⁷² 30 TAC § 60.3 (a)(3)(E).

⁷³ UEC Ex. 7, Holmes Issue A Rebuttal at 2.

Moreover, UEC argued that when questioned by OPIC at the hearing, TCEQ's witness Mr. Murry said that he did not think the TRC NOV would affect UEC's compliance history classification at the TCEQ even if considered.⁷⁴ According to UEC, that conclusion is appropriate, given the nature of the violations, UEC's prompt remedial action, and the number of other TRC inspections of UEC's exploration drilling activities that resulted in no other NOV's.⁷⁵

UEC concluded that the record provides no support for finding that UEC has "an unacceptable compliance history based on violations constituting a recurring pattern of conduct that demonstrates a consistent disregard for the regulatory process, including a failure to make a timely and substantial attempt to correct the violation(s)."

2. Protestants

Protestants claimed that the TRC Inspection Report and NOV demonstrate that UEC failed to take rules and procedures seriously and should not be trusted with the rights and responsibilities attendant to *in situ* mining for uranium. Protestants further argued that UEC has not disputed (because it cannot) the numerous violations committed during exploration drilling. The NOV issued by TRC states that UEC failed to properly install cement surface plugs and mark the exact location of each borehole.⁷⁶ As stated in the inspection report accompanying the NOV, UEC was required to mark each borehole location in such a way that TRC could verify the presence of a surface plug.⁷⁷ TRC attempted to locate the boreholes, but the inspectors were able to tag the surface plug in only six holes of the 117 inspected.⁷⁸ TRC required each borehole drilled at the site to have a 10-foot surface plug located three feet below the surface, but the majority of the borehole locations could not be located for verification.⁷⁹ The report also states that of the 14 boreholes located, five were found to be open to the surface with the cement plug

⁷⁴ Tr., Vol. 7 at 1404-1405 (Murry).

⁷⁵ UEC Ex. 7, Holmes Issue A Rebuttal at 2-4; UEC Ex. 7, Holmes Issue A Rebuttal Ex. 33.

⁷⁶ *Id.*

⁷⁷ *Id.*

⁷⁸ *Id.*

⁷⁹ *Id.*

estimated to be greater than 20 feet below the surface, and the remaining plugs found were between 0 and 18 inches below the surface.⁸⁰

Regarding drill site reclamation, Protestants called attention to the TRC Inspection Report notation that allowing mud pits to dry before being backfilled aids in preventing excursions of semi-solid drilling fluids.⁸¹ In spite of this, UEC was backfilling drilling pits very quickly after the hole was logged, with no drying period, and this process caused lighter drilling liquids to be crowded out of the pit and flow on to the surface.⁸²

According to Protestants, UEC's exploration permits required each borehole to be plugged within seven days after drilling, unless an aquifer was encountered, in which case the borehole had to be plugged within 48 hours.⁸³ Since UEC's boreholes were drilled into the Evangeline aquifer they all should have been plugged within 48 hours. Protestants asserted that UEC violated this permit condition by leaving 139 exploration boreholes unplugged longer than 48 hours.⁸⁴

Protestants further argued that UEC converted 20 boreholes into regional baseline wells (RBLs).⁸⁵ Of these, 18 were not cased within 48 hours, as required by UEC's permits.⁸⁶ They pointed out the RBLs are used to establish baseline water quality for purposes of post-mining reclamation. By being left open, Protestants argued, the RBLs allowed air, oxygen and rain water to contact the groundwater which distorted the uranium and radium-226 concentrations upward.

⁸⁰ *Id.*

⁸¹ *Id.*

⁸² *Id.*

⁸³ Goliad County Ex. 4, Darling Direct, Ex. 5.

⁸⁴ Goliad County Ex. 4, Darling Direct, Ex. 1 at 11.

⁸⁵ *Id.* at 12.

⁸⁶ *Id.*

Protestants claimed that UEC's poor behavior was internally recognized and properly described in a scathing memorandum authored by an upper level UEC employee. They quoted the following excerpts from the document:

I was immediately struck by the poor communications and lack of necessary information at the project site. I witnessed a "comedy of errors" on the parts of all concerned (site management, consultants, and contractors);

* * *

I am concerned that UEC has set itself for failure in this region of Texas and corrections must be applied;

* * *

Site management appeared confused about what regulatory standards need to be met and how to meet them;

* * *

Legal and environmental regulatory consultants are conducting negotiations and establishing policy without concurrence and representation by UEC management personnel. In my face-to-face meeting with these consultants, it was emphasized that certain issues need to be discussed outside of "earshot" [direct quote] of site personnel, these same persons being UEC site management. Thus, site personnel have not known to what standards they are being held;

* * *

Some contractors were likely more conscientious than others as was shown in the handling of drill site material at various places. ... The contractors are by necessity self-policing. The damage that can be caused to the reclamation program can occur within moments and take days to rectify.⁸⁷

⁸⁷ *Id.*

3. OPIC

OPIC agreed with Protestants and recommended that UEC's Mine Application be denied based on its compliance history. OPIC explained that UEC's compliance history with the TCEQ is not useful because UEC and the Goliad County site have not previously been permitted by the TCEQ. This means that under the TCEQ compliance history rules found in 30 TAC ch. 60, UEC defaults to an "average" compliance history rating.

OPIC argued that consistent with the ALJ's ruling at the prehearing hearing conference, UEC's compliance history with the TRC was admitted as part of the evidentiary record in this docket. As stated in TEX. WATER CODE § 27.051(e), "Evidence of compliance or noncompliance ... with environmental statutes ... may be ... admitted into evidence." According to OPIC, "environmental statutes" are not limited to statutes implemented by the TCEQ. In fact, TCEQ and TRC have split jurisdiction over injection wells.⁸⁸ According to OPIC, UEC's compliance history with the TRC warrants denial of the Mine Application. The record indicates UEC failed to comply with its exploration permits and TRC regulations.⁸⁹ Furthermore, OPIC argued, UEC's violations during the exploration phase of this project likely degraded the groundwater quality at the site. OPIC concluded that UEC's compliance history is unacceptable, and under TEX. WATER CODE § 27.051(e), requires denial of the permit.

4. Executive Director

According to the ED, UEC's compliance history was evaluated according to the rules laid out in 30 TAC ch. 60, and was assigned a rating of 3.01, the average classification by default.⁹⁰ TCEQ rules require denial of an application for a permit only when the applicant has an unacceptable compliance history. The ED emphasized that a determination that an applicant has an unacceptable compliance history must be based on violations constituting a recurring pattern

⁸⁸ See, 30 TAC § 331.11.

⁸⁹ See, Goliad County Ex. 4, Darling Direct, Ex. 3.

⁹⁰ ED Ex. ED-8, Uranium Energy Corp's Compliance History report.

of conduct that demonstrates a consistent disregard for the regulatory process, including a failure to make a timely and substantial attempt to correct the violation(s).⁹¹ Thus, the ED applied these criteria to the facts and argued that under the TCEQ rules, UEC's compliance history does not require denial of its application.

The ED argued that under current TCEQ rules, compliance history does not include information related to compliance with legal requirements under the jurisdiction of another state agency, such as the TRC. Therefore, the ED did not include UEC's compliance history with the TRC as part of his review of the permit application. However, the ED acknowledged that in considering whether the use and installation of the wells is in the public interest, the Texas Water Code does not limit the Commission to considering only compliance history components in TCEQ's rules.

However, the ED noted that the alleged violations were addressed to the satisfaction of the TRC, and it did not issue any enforcement orders or impose any penalties against UEC.

Therefore, the ED concluded that based on a consideration of the full record of this proceeding, the evidence regarding UEC's compliance with TRC regulations does not indicate a pattern of disregard for the regulatory process that would warrant denial of the application on the basis of compliance history.

B. ALJ's Analysis

At a prehearing conference convened on April 30, 2010, the ALJ ruled that UEC's TRC compliance history would be considered with respect to the Mine Application. The ALJ found that consideration of the TRC NOV was consistent with the components of compliance history set forth in 30 TAC § 60.1(c)(7). Additionally, the ALJ concluded that it would be incongruous to ignore TRC compliance history associated with exploratory drilling conducted for the very

⁹¹ 30 TAC § 60.3(a)(3)(E).

purpose of seeking a TCEQ permit for drilling and use of Class III injection wells for *in situ* uranium mining, especially where no meaningful TCEQ history exists.

UEC's TRC NOV was based mainly on: (1) failure to provide a physical marker for boreholes such as a stake rather than using GPS coordinates; (2) failure of UEC's drilling contractors to properly clean up cuttings and drilling mud at some boreholes; (3) failure to plug to within three feet of the surface (some too low and some too high); and (4) failure to plug or case some of the boreholes within the allotted time. Although the ALJ is mindful that such violations are serious and should not be disregarded, he is equally concerned that they not be exaggerated. In this regard the ALJ finds it persuasive, as pointed out by the ED and UEC, that the violations were promptly rectified to the satisfaction of the TRC; no enforcement orders were issued; and no penalties were assessed.

Protestants place much weight on what they characterize as a "scathing memorandum" written by UEC's upper level employee, Paul Pierce. Protestants portray the memorandum as an indictment of UEC's worthiness for issuance of the requested *in situ* mining permits. However, the ALJ views the significance of the memorandum much differently. Rather than showing a casual indifference to the violations alleged in the NOV, the memo shows a forthright recognition of the gravity of the shortcomings, and reveals an attitude of determination that no similar noncompliance will be tolerated in the future. Stated differently, the ALJ views the memorandum as an open acknowledgement of responsibility for the violations and an indication of firm resolve that such noncompliance will not occur again.

Based on consideration of the entire record, the ALJ finds that Protestants have failed to show by a preponderance of the evidence that UEC has exhibited a recurring pattern of conduct that demonstrates a consistent disregard for the regulatory process, including a failure to make timely and substantial attempt to correct the violations, as required by TCEQ rules.⁹² The ALJ further agrees with Mr. Murry's opinion that even if TCEQ had considered UEC's

⁹² 30 TAC § 60.3(a)(3)(E).

compliance history based on the TRC NOV, it would have not changed the "average" classification that TCEQ assigned to UEC.

VIII. ISSUE C

Does the application adequately and accurately describe baseline conditions of the groundwater in the proposed permitted area under applicable requirements of 30 TAC Chapter 331?

Recommendation:

The ALJ notes for clarification that although this issue was referred for consideration in connection with the Class III injection well permit, there are no TCEQ rule requirements for establishing baseline conditions as part of the Class III application. Rather, baseline water quality determination is required as part of the PAA to establish a restoration table for each production area. The parties' presentations regarding baseline water quality in these contexts often overlap. To the extent that the Class III application includes information regarding water quality for the purpose of providing a general idea of the quality of the water within the area that UEC proposes to mine, the Class III application adequately and accurately describes the pre-mining groundwater quality. However, the Commission's attention is directed to the discussion of Issue L (whether UEC's proposal for restoration of groundwater to baseline levels is reasonable) and Section XXVII B. about the adequacy and accuracy of the restoration table for PAA-1. In those sections, the ALJ makes contra-findings.

A. Parties' Arguments

1. UEC

According to UEC, representative water quality was established by sampling all wells within the proposed permit area and by sampling nearly all the wells within 1 kilometer of the permit area boundary. In addition, UEC completed 20 baseline wells. Chapter 5 of the Mine Application contains water quality results for the 20 baseline wells and the 47 area wells within the area of review (AOR). The location of the baseline wells largely correspond to the area where UEC anticipates mining (i.e., areas of high uranium mineralization). The significant difference in the levels of uranium and radium-226 between the AOR wells and the baseline wells is shown in the following table: